

## **REMARKS**

Claims 1-7 and 11-19 are pending. The Examiner's reconsideration of the objections and rejections is respectfully requested in view of the amendments and remarks.

Applicants appreciate the Examiner's indication that claims 3, 5-7, 11-13 and 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in the Office Action and to include all of the limitations of the base claim and any intervening claims.

The Abstract of the Disclosure has been objected to; the Examiner stated essentially that the use of the word "comprises" in the Abstract of the Disclosure is improper. The Abstract of the Disclosure has been amended to replace the word "comprises" with "includes."

Reconsideration of the objection is respectfully requested.

Claims 1-7 and 10-15 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated essentially that the term "direct current voltage component signal" is unclear.

The claims have been amended to clarify the limitations. Respectfully, Applicants believe that the term "direct current voltage signal" to be clear. For example, a voltage signal applied to a pin may be one of a direct current or an alternating current. The claims are believed to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner's reconsideration of the rejection is respectfully requested.

Claims 1, 2, 4, 10, and 14 have been rejected under 35 U.S.C. 102(b) as being anticipated by Penrod (U.S. Patent No. 3,993,984). The Examiner stated essentially that Penrod teaches all the limitations of claims 1, 2, 4, 10 and 14.

Claim 1 claims, *inter alia*, “a pin for receiving a direct current voltage signal; a signal source for applying an alternating current voltage signal to the pin.”

Penrod teaches a power line for conducting an alternating current (see col. 3, lines 23-34). Penrod does not teach applying an alternating current to a pin for receiving a direct current voltage signal, essentially as claimed in claim 1. The line 10 of Penrod is clearly designed to receive an alternating current. Penrod fails to teach a pin for receiving a direct current, much less receiving an alternating current at a pin for receiving a direct current. Therefore, Penrod fails to teach all the limitations of claim 1.

Claims 2, 4 and 14 depend from claim 1. Claim 10 has been cancelled.

Claims 1, 2, 4, 10 and 14 have been rejected under 35 U.S.C. 102(b) as being anticipated by Suga (U.S. Patent No. 4,468,796). The Examiner stated essentially that Suga teaches all the limitations of claims 1, 2, 4, 10 and 14.

Claim 1 claims, *inter alia*, “a pin for receiving a direct current voltage signal; a signal source for applying an alternating current voltage signal to the pin.”

Suga teaches a transmission line for inputting a signal PT (see Figures 1 and 3). Suga does not teach “a pin for receiving a direct current voltage signal; a signal source for applying an alternating current voltage signal to the pin” as claimed in claim 1. The signal PT of Suga is an alternating waveform as shown in Figure 3; an alternating current. The signal PT is not a direct current voltage signal as claimed in claim 1. Suga fails to teach applying an alternating current voltage signal to a pin for receiving a direct current voltage signal. Therefore, Suga fails to teach all the limitations of claim 1.

Claims 2, 4 and 14 depend from claim 1. Claim 10 has been cancelled.

New claim 16 includes the limitations of claim 1 and allowable claim 5. Therefore, claim 16 is believed to be in condition for allowance.

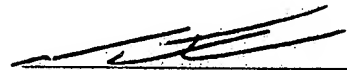
New claim 17 claims, *inter alia*, "a digital detector for detecting a frequency of the digital signal and outputting a predetermined detection signal, wherein the digital detector comprises a plurality of inverter stages responsive to a reference signal."

Neither Penrod nor Suga teaches a digital detector comprising a plurality of inverter stages responsive to a reference signal. Therefore, claim 17 is believed to be in condition for allowance.

Claims 18 and 19 depend from claim 17. The dependent claims are believed to be allowable for at least the reasons given for claim 17.

For the forgoing reasons, the present application, including claims 1-7 and 11-19, is believed to be in condition for allowance. The Examiner's early and favorable action is respectfully urged.

Respectfully submitted,



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